

United States Nonprovisional Patent Application of

**Randal G. McClure**

P.O. Box 99  
McClellanville, SC 29458

Citizen of the United States

SPECIFICATION

TITLE OF THE INVENTION

**Artist's Color Chart Device**

BACKGROUND OF THE INVENTION

Technical Field:

[0001] The present invention relates to an artist's color chart device for assisting a painter in making color charts.

Background Information:

[0002] Art students are often asked to create a series of color charts as an immediate learning experience and as a reference tool for periodic use throughout their careers. Making color charts is a systematic process that teaches the student about color. After having worked on a set of color charts, the art student can usually predict with greater accuracy what X amount of a dominant color plus Y amount of a selected color

with the subsequent addition of white will look like on the canvas or other painting surface. These color charts are used by the student as a training tool or, later on, by the more experienced artist to see color more accurately. Art students often retain their color charts for years, pulling them out periodically to refresh their recollection. Normally an art student will create about a dozen color charts, each with a different dominant color. The completed color charts may serve as a reference throughout an artist's career.

[0003]        However, making color charts conventionally is a tedious task. First, the art student must purchase the right supplies, and then paint small, evenly spaced squares on Masonite boards using a paint brush or a palette knife, for example. Usually, the student must be taught how to apply tape strips to each board, leaving appropriately sized squares for receiving the chosen paints in prescribed proportions. The art student then gradually adds the selected dominant color to the other colors of a chosen group of colors (the palette) in a specific orderly fashion and, with the addition of white paint, gradually lowers the value mixture down the column, painting each color value in the appropriate square. A different colored paint may be substituted for white to lower the value, but white is preferred. Once the student has applied the various values to the squares, he or she removes and discards the tape, which is a messy task, and sets the painted board out to dry. This must be repeated twelve or so times, depending on the number of colors in the student's palette or the number of boards being included in the student's set.

[0004]        Although most art students enjoy the painting part of this process, most of them dislike procuring the appropriate supplies, taping the boards, and, later, removing the messy tape. Thus, there is a need for an artist's color chart device that will assist art students in the production of color charts and make the color chart production process less time consuming, easier, neater, and more satisfying.

## BRIEF SUMMARY OF THE INVENTION

[0005] The present invention is a color chart device for assisting an artist in making color charts, which comprises:

- (a) a board portion having a paintable upper surface;
- (b) a flexible, removable, disposable, peel-off upper sheet portion comprising an adhesive on its lower face, the upper sheet portion being removably attachable to the upper surface of the board portion; and
- (c) a plurality of similarly shaped apertures arranged in a plurality of spaced apart rows and generally vertical columns in the upper sheet portion. Preferably, the upper sheet portion is transparent or translucent, and generally has the same shape as the board portion.

[0006] The color chart device herein preferably further includes a number of spaced apart, outlined shapes marked on the upper surface of the board portion, with the apertures in the upper sheet portion having substantially the same shape and arrangement as the outlined shapes. In this embodiment, the apertures overlay the outlined shapes when the upper sheet portion is attached to the board portion.

[0007] Additionally, the upper sheet portion may be perforated or otherwise divided between the columns into peel-off strips, so that a strip may be removed once the artist has completed painting the shapes in a particular column or group of columns. Also, the color chart device of the present invention may include a removable transparent cover panel over the disposable upper sheet portion to protect the painted shapes once the upper sheet portion is removed.

[0008] An alternate, generally circular color chart embodiment herein includes apertures, preferably rectangles or ovals, that gradually decrease in size toward the center

of the color chart. One generally circular, aesthetically pleasing color chart embodiment herein has a hole at the center for the artist to insert his or her fingers and hold the chart while painting it, if desired.

[0009] Also included herein is a method of making a color chart device, comprising the steps of:

(a) optionally, removably attaching an upper sheet portion to a board portion so that a plurality of apertures on the upper sheet portion correspond to and overlay a plurality of corresponding outlined shapes on the board portion, the apertures and the outlined shapes being in the same arrangement of spaced apart rows and generally vertical columns as one another;

(b) painting in the outlined shapes on the board portion, which are exposed by the apertures, with a related series of graduated color values within each column, with a different color series in each of the columns;

(c) detaching the upper sheet portion from the board portion and disposing of it; and

(d) allowing the painted board portion to dry.

[0010] Advantages of the instant color chart device include: assisting art students in the production of useful, durable color charts; and making the color chart production process less time consuming, easier, neater, and more satisfying. The adhesive on the lower face of the upper sheet portion adheres the upper sheet portion to the board portion; therefore, bleeding of the paint onto the board portion is minimized. The perforated lines in the upper sheet portion allow the user painting the color chart to take a break between sections, if desired. The optional cover panel protects the painted surface of the board portion once the upper sheet portion has been removed. Lastly, the generally circular-shaped color chart embodiment herein, which includes outlined shapes that gradually decrease in size toward the center of the color chart device, allows the student user to learn

scale in addition to color. The optional hole in the center of the circular color chart embodiment allows the artist user to hold the color chart while painting it, if desired.

#### BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0011] A more complete understanding of the invention and its advantages will be apparent from the following detailed description taken in conjunction with the accompanying drawings, wherein examples of the invention are shown, and wherein:

[0012] FIG. 1 is a perspective view of an artist's color chart device according to the present invention, shown with peel-off aperture strips;

[0013] FIG. 2 is a perspective view of an alternate embodiment of an artist's color chart device according to the present invention, shown with a one piece peel-off aperture sheet portion;

[0014] FIG. 3 is a perspective view of an artist's color chart device according to the present invention, shown with peel-off aperture strips;

[0015] FIG. 4 is a perspective view of an alternate embodiment of an artist's color chart device according to the present invention, shown with a sheet portion binding and handle;

[0016] FIG. 5 is a perspective view of a removable sheet device according to the present invention, shown above a board;

[0017] FIG. 6 is a top plan view of a circular-shaped artist's color chart device according to the present invention;

[0018] FIG. 7 is a top plan view of an alternate embodiment of a circular-shaped artist's color chart device according to the present invention, shown with peel-off strips and a central hole; and

[0019] FIG. 8 is a top plan view of an alternate embodiment of a circular-shaped artist's color chart device according to the present invention, showing alternating aperture shapes.

#### DETAILED DESCRIPTION OF THE INVENTION

[0020] In the following description, like reference characters designate like or corresponding parts throughout the several views. Also, in the following description, it is to be understood that such terms as “front,” “back,” “within,” and the like are words of convenience and are not to be construed as limiting terms. Referring in more detail to the drawings, the invention will now be described.

[0021] Turning first to FIG. 1, a generally rectangular-shaped artist's color chart device according to the present invention, which is generally referred to herein as **10**, comprises a durable, substantially planar board portion **11** with spaced apart, matching outlined shapes **14** marked on its upper surface, and an upper sheet portion **12** attachable to the upper surface of the board portion **11**. The upper sheet portion **12** has a number of spaced apart, through apertures **13** corresponding to the outlined shapes **14**. The board portion **11** is made of a durable, paintable material, preferably a relatively flexible white plastic material with a dull matte finish on its upper surface, and most preferably a coated, acid neutral illustration board. In FIG. 1, the outlined shapes **14** and the corresponding apertures **13** are evenly spaced apart and same sized.

[0022] The apertures **13** and outlined shapes **14**, which are generally square-shaped in this preferred embodiment, are arranged in rows **15** and columns **16**. The rows **15** extend in a horizontal direction, and the columns **16** extend in a vertical direction. In the preferred embodiment depicted in FIG. 1, there are an odd number of columns **16**, and rows **15**, although an even number of columns or rows would also be suitable herein.

[0023] Continuing to refer to FIG. 1, the flexible, disposable upper sheet portion **12** is removably attachable to the upper surface of the board portion **11**. In the embodiment depicted in FIG. 1, the upper sheet portion **12**, like the board portion **11**, is rectangular in shape. The outlined shapes **14** on the board portion **11** lie immediately below the corresponding apertures **13** when the upper sheet portion **12** is attached to the board portion **11**.

[0024] Where the upper sheet portion **12** is transparent or translucent, each outlined shape **14** can be seen through the flexible sheet material along the edges of the same sized, corresponding aperture **13**. Alternatively, the upper sheet portion is a neutral gray color so that it does not interfere with the artist's color perception. It is believed that a stark white upper sheet portion may inhibit proper observation of color values, and therefore the learning experience. The board portion is preferably also neutral gray for the same reason.

[0025] The removable upper sheet portion **12** has an adhesive **19** on its bottom face, so that the upper sheet portion is removably attachable to the upper surface of the board portion **11**. Any suitable adhesive, such as a pressure sensitive adhesive, that allows easy attachment and detachment of the thin sheet material may be employed. Removably fastening the upper sheet portion **12** to the upper surface of the board portion **11** in this manner helps to prevent bleeding of the paint between the sheet material and the board, and leaves the edges of the painted outlined shapes **14** crisp. Any suitable paint may be utilized, including watercolors, oils, pastels, and acrylics.

[0026] As shown in FIG. 1, the upper sheet portion **12** is scored or otherwise divided between columns **16**, forming multiple side by side sheet portion strips **17**. This is advantageous in that one straight strip **17** at a time may be neatly peeled off. When a user has finished painting the apertures **13** within one column **16**, the user peels away the strip **17** covering that column of painted outlined shapes **14** and disposes of it. The column of painted outlined shapes, each with clean edges, is then clearly visible. This allows immediate feedback for the artist. It allows the artist to decide when to reveal the painted shapes. Since the artist generally explores a mixture of the dominant color with one other color of the chosen palette in each column, removing a strip **17** each time the color mixture is changed is logical and neat. For the embodiment of FIG. 1, for example, the artist chooses a palette of eleven different colors, e.g., raw sienna, vermilion, etc. Peel-off strips **17** are particularly well-suited for the artist who has completed some of the columns **16** of a color chart **10**, and plans on completing the color chart the next day. The adhesive **19** on the strips **17** leaves no residue on the board portion **11** when the strips are peeled off.

[0027] FIG. 2 shows an alternate, preferred color chart device **10** having a one-piece upper sheet portion **12** that peels off once the apertures **13** have been filled in with the appropriate color values. This is a very quick procedure, especially when compared with the previous conventional process of taping, painting, and untaping boards. The used upper sheet portion **12** is disposed of in an appropriate manner. The adhesive **19** on the bottom face of the upper sheet portion **12** leaves no residue on the board portion **11** when the strips are peeled off. Clean edges remain behind on the board portion, which is usable as a color reference for years thereafter.

[0028] Referring to FIGS. 1 and 3, the color chart device **10** comprises the same number and arrangement of outlined shapes **14** and apertures **13**. Eight to twelve columns, and five to seven rows are most preferred. This columnar arrangement is advantageous



because it allows a variety of the artist's favorite colors (eight to twelve) to be chosen for investigation in each color chart. An odd number of apertures in a column, preferably five or seven, has been found to be ideal for showing off the color values, since the middle color value is approximately halfway between the uppermost square in the column and the lowermost square in the same column. The apertures may have any shape, including squares, ellipses, ovals, and circles.

[0029] As seen in FIG. 3, the uppermost painted shape **14** in each column **16** in the color chart device **10** is the darkest value, since it is painted with a selected color straight from the tube mixed with the dominant color for that chart straight from the tube (i.e., without dilution by white). Then for each descending square, the value of the mixture is lightened with white. The lowermost painted square (at the bottom of the color chart) is the faintest value, since it contains the least amount of the selected color mixture. The middle painted square in the column is halfway between the uppermost and lowermost painted outlined shapes (here, squares). Thus, each outlined shape **14** in the first row **15a** across the top of the color chart, once the chart is complete, shows each of the colors of the palette as it interacts with the dominant color chosen for investigation in that color chart.

[0030] Also, each outlined shape **14** in the last row **15e** across the bottom of the completed color chart **10** will show the lowest possible value for the mixture and will be nearly white. Although white is preferred, black or neutral gray paint may be used instead of white. Again, the adhesive **19** on the bottom face of the upper sheet portion **12** leaves no residue on the board portion **11** when the upper sheet portion is removed.

[0031] Additionally, the board portion **11** comprises a blank first information line **21** at the top of each column of outlined shapes **14** for labeling a color for that column **16**, such as "Burnt Sienna", "Cadmium Yellow", or "Windsor Blue". As seen in FIG. 3, the board portion **11** also includes blank second lines **22** along one side of the board portion **11**

for writing down other relevant information with any suitable writing implement, such as a pen, pencil, or marker. This area may also be used for printing marketing insignia, logos, or the like.

[0032] Turning to FIG. 4, the color chart device **10** further includes a protective cover panel **18** and a flexible handle **24**, which is attached at its opposite ends to corners of the board portion **11**. Using the handle **24**, a color chart device **10** may be hung on a hook on a wall. Since the handle **24** is collapsible, it does not interfere with stacking several color chart devices **10** on top of one another. The handle **24** is also useful for carrying one or more color chart devices **10**.

[0033] In regard to the cover panel **18** shown in FIG. 4, the cover panel **18** preferably has the same size and shape as the part of the board portion **11** that is covered with the painted shapes. The cover panel **18** is preferably transparent, so that the paints on the board portion are visible through it. Once the upper sheet portion **12** has been discarded and the paint dries, the user overlaps the cover panel **18** over the board portion **11** in order to provide some protection from paint discoloration, damage by leaks or spills, or other damage over time. The cover panel **18** is particularly useful as a protective barrier where a number of color chart devices **10** are stacked on top of one another. The cover panel **18** is also particularly useful as a protective barrier when the paint is of a fragile nature, such as pastels, oil sticks, or crayons. A clear acetate with ultraviolet resistance is a preferred cover panel material.

[0034] In FIG. 4, an edge of the cover panel **18** is attached to a corresponding edge of the board portion **11**, preferably by a cover panel binding **20**. An alternative embodiment includes removable adhesive on the bottom face of a separate cover panel **18**, so that the cover panel can be removably attached to the board portion **11** once the paint has fully dried.

[0035] Turning to FIG. 5, the present invention also contemplates a removable sheet device **25** for guiding lines in an artist's color chart. The sheet device includes the apertures **13** arranged in spaced apart rows and columns on a flexible, paintable sheet of material, and an adhesive **19** on a lower face of the sheet of material **26** between the apertures **13**. The sheet device is removably attachable to an upper surface of any suitable, unmarked artist' board **27**, as shown in FIG. 5. The sheet device **25** preferably includes a similarly sized disposable sheet of paper backing **29** covering the adhesive lower face. The backing **29** is peeled off and discarded prior to adhesion to the artist's board **27**. The sheet of material **26** is preferably translucent or transparent, or a neutral gray color, which may be a better contrast for detecting the nuances of different color values. The sheet device may be used as described herein.

[0036] Continuing with FIG. 5, the peel-off strips are preferably divided by at least one perforated line **28** extending through the material sheet **26** between at least two of the columns **16** of apertures **13**. The perforated lines **28** form six side by side sheet portion strips **17**. This is advantageous in that one strip **17** at a time may be neatly peeled off. When a user has finished painting the apertures **13** within one or two columns **16**, the user peels away the straight strip **17** covering those column(s) and disposes of it. The columns of painted squares, each with clean edges, are then clearly visible.

-

[0037] In an alternate, generally circular-shaped embodiment **30** depicted in FIG. 6, a generally circular upper sheet portion **32** with a number of quadrilateral-shaped apertures **33** overlies a generally circular, same-sized board portion **31**, which is visible through the apertures in FIG. 6. The apertures **33** are arranged in an annular arrangement of columns **36**. Each column is generally conical in shape and radiates out from the center of the chart device. The apertures **33** in each column gradually decrease in size toward the center of the chart **30**. This is advantageous in that it teaches the student user scale in addition to

color values. The circular board portion **31** also preferably includes indicia **39** printed in a blank column for identifying the dominant or selected colors of that particular chart.

[0038] To use the artist's color chart device **30**, the user mixes a certain amount of the selected dominant color with a certain amount of a second color from the student's palette, and then mixes in the white paint according to the value desired for each square. The user then applies each paint mixture to the board portion **31** through each aperture **33**.

[0039] As the user travels down the board portion **31** within a column **36** painting the apertures **33**, the amount of white paint in the mix increases in increments from the outermost aperture **33** to the innermost aperture **33** in each column **36**. Thus, within a column **36**, each successive aperture **33** underneath the top aperture receives a shade of paint with a lighter value.

[0040] The user need not be overly concerned about confining the paint to the apertures **33** because the upper sheet portion **32** protects the areas of the board portion **31** that are not exposed by the apertures **33**. Once the user finishes painting the different values within the apertures **33**, he or she detaches the upper sheet portion **32** from the board portion **31** and discards the upper sheet portion **32**. The adhesive on the lower face of the upper sheet portion **32** adheres the upper sheet portion to the board portion **31**, so bleeding of the paint is minimized. The painter is left with a guide having neatly outlined shapes that he or she can use as a color reference for years to come. Normally, about a dozen artist's color charts **30** with a wide variety of dominant colors are completed by the student. The artist's color chart device is preferably purchased in sets of six (6) or twelve (12) color chart devices so as to illustrate a wide variety of often used (dominant) colors.

[0041] In a second circular-shaped embodiment shown in FIG. 7, the board portion **41** and the one-piece upper sheet portion **32** are generally circular in shape, with the latter

superimposed on the former and held in place by means of an adhesive layer on the bottom face of the upper sheet portion. The upper sheet portion is divided into strips by five perforated lines 28, with two or three columns 36 in each strip. When a user has finished painting the apertures 33 within a set of three columns 36, the user peels away the corresponding strip 37 of the upper sheet portion 32 covering that section of the board.

[0042] Blank, curved first indicia lines 42 are located on the board portion 41 above each column 36 for labeling a dominant color for that column. The device preferably includes a hole 43 along its edge for hanging the board on the wall, if desired. Optionally, a circular cover panel 38 resembling a snap-lock plastic lid may be slipped over the circumference of the board portion 31, 41 after detachment of the upper sheet portion 32 from the board portion 31, 41.

[0043] Continuing with FIG. 7, the upper sheet portion 32 and underlying board portion 41 include a generally circular central hole 44, which is at least two inches in diameter so several fingers can be inserted from the bottom of the color chart device. This central hole 44 gives the artist the option of holding the color chart device during painting, if the artist desires to do so. It also avoids having an unused central area in the color chart device, where apertures would be too small to be useful.

[0044] This circular embodiment of the instant color chart device is also aesthetically pleasing. The color chart device has an annular arrangement of columns centered around a central hole, with each column being made up of stepped, square impressions. The generally rectangular apertures 33 in the present upper sheet portion 32 are slightly smaller than the outlined shapes 34 marked on the board portion 41. Since the apertures 33 are optionally smaller than the outlined shapes 34, the finished, painted rectangles can have a stepped, or outlined, appearance. With this circular arrangement, the

student gains an appreciation of color harmony in a scaled setting. The upper sheet portion is preferably transparent, as shown in FIG. 7.

[0045] FIG. 8 depicts yet another alternate, aesthetically pleasing embodiment of the artist's color chart device. In this embodiment, the board portion **41** and upper sheet portion **31** are generally circular in shape. Here, some of the apertures **33** are quadrilateral in shape, and some are oval **34** in shape. The quadrilateral-shaped apertures **33** generally alternate with the oval-shaped apertures **34** to provide general exposure to shape and scale and variety, which is important for the artist painting a number of color charts. Different aperture shapes may be used. The board portion **31** and upper sheet portion **32** comprise an annular arrangement of generally conical-shaped sections **45**, which in turn each comprise a single column of outlined shapes (board portion) or apertures **33**, **34** (upper sheet portion). Each conical-shaped section **45** depicts a different shade of one dominant color mixed with the diminished color, which is preferably white. The upper sheet portion **32** may be perforated or otherwise sectioned into conical-shaped strips, in which each strip corresponds to a conical-shaped section **45**, as in the embodiment shown in FIG. 7.

[0046] Also included herein is a method of using an artist's color chart device **10**, **30**, comprising the steps of:

(a) painting the outlined shapes **14**, **34** on the board portion **11**, **31**, **41** which are exposed by the apertures **13**, **33**, with a related series of graduated color values in each column **16**, **36**, with a different color series in each of the rows;

(b) detaching the upper sheet portion **12**, **32** from the board portion **11**, **31**, **41** and disposing of it; and

(c) allowing the painted board portion **11**, **31**, **41** to dry. The method may further include an initial step of: (a1) removably attaching an upper sheet portion **12**, **32** to a board portion **11**, **31**, **41**, so that a plurality of apertures **13**, **33** on the upper sheet portion **12**, **32** correspond to and overlay a plurality of corresponding outlined shapes **14**,

34 on the board portion, the apertures 13, 33 and the outlined shapes 14, 34 being in the same arrangement of rows 15 and columns 16, 36 as one another. The method preferably further includes the step of: removably attaching a cover panel 18, 38 to the board portion 11, 31, 41 after detaching the upper sheet portion 12, 32 from the board portion 11, 31, 41.

[0047] From the foregoing it can be realized that the described device of the present invention may be easily and conveniently utilized as an artist's color chart device, or method of using it. It is to be understood that any dimensions given herein are illustrative, and are not meant to be limiting.

[0048] While preferred embodiments of the invention have been described using specific terms, this description is for illustrative purposes only. It will be apparent to those of ordinary skill in the art that various modifications, substitutions, omissions, and changes may be made without departing from the spirit or scope of the invention, and that such are intended to be within the scope of the present invention as defined by the following claims. It is intended that the doctrine of equivalents be relied upon to determine the fair scope of these claims in connection with any other person's product which fall outside the literal wording of these claims, but which in reality do not materially depart from this invention.

[0049] Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.